

Brentwood
Urban District Council.

REPORT
OF THE
MEDICAL OFFICER
OF HEALTH

(SAMUEL FRAZER, L.R.C.P., L.R.C.S., &c. Fellow of
the Royal Institute of Public Health).

For the Year 1904.

JANUARY, 1905.

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ANNUAL REPORT

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MEDICAL OFFICER OF HEALTH

(SAMUEL FRAZER, L.R.C.P., L.R.C.S., &c. Fellow
of the Royal Institute of Public Health).

FOR THE YEAR 1904.

TO THE CHAIRMAN & MEMBERS OF THE URBAN DISTRICT COUNCIL.

GENTLEMEN,—

In accordance with the requirements of the Local Government Board, I have pleasure in submitting to you my Report on the Sanitary condition of Brentwood for the year 1904.

In this Report I purpose adopting the course I pursued last year of arranging the desired information under certain headings suggested in a memorandum from the Local Government Board and which has been sent to all Medical Officers of Health.

1.—Physical Features and General Character of the District.

The Urban District of Brentwood consists of the old Parish of Brentwood with an area of 354 acres, and is situated for the most part on an elevated position on the London and Colchester main road between Chelmsford and Romford.

The District is bounded by the Parishes of South Weald, Shenfield and Great Warley. The parts of South Weald and Shenfield Parishes which immediately adjoin Brentwood are of an Urban character and for the purpose of drainage have been formed into a Special Drainage District and connected with the Brentwood system.

There is a small brook running between Brentwood and the Parishes of Shenfield and South Weald, which takes most of the surface drainage of the District, and which eventually discharges into the Ingrebourne brook, near Brook street.

Brewing, the manufacture of Agricultural Implements, and Brick-making are the principal industries. A large number of persons whose occupations are in London, reside in the district, the remainder being chiefly employed in the different places of business and workshops.

2.—House Accommodation, especially for the Working Classes : its adequacy and fitness for habitation. Supervision over erection of new houses.

Houses of a rental of from £30 a year upwards seem plentiful in the District, but there is not the slightest doubt that there is still a demand for houses for the working classes. The twenty-nine cottages which the Council completed last year under the provisions of the Housing of the Working Classes Act have proved a boon to the working man and such a decided success in every way, that it is hoped a suitable site may be found for carrying out another similar scheme of building. They cost £6000 and are let at from 5s. 9d. to 6s. 6d. per week.

There has been only one case of overcrowding. In six cases animals were improperly kept in the yards.

The bye-laws with respect to new houses are very fairly enforced, and though there are sometimes plans sent in by unqualified draftsmen

which do not conform to the requirements, still, on the whole, the principal architects show a desire to comply with the bye-laws and in every way meet the wishes of the Council.

The Surveyor, Mr. Fothergill, points out to the Plans Committee every detail which does not comply with the bye-laws, and after the plans are passed, exercises strict supervision over the building.

There were 36 new houses built during the year, being less than half the number for the year before. But this decrease is to a certain extent explained by the fact, that in the year before last the Council's 29 new cottages were completed. There are ten houses at present unoccupied.

3.—*Sewerage and Drainage.*

The sewage is disposed of upon a sewage farm situated on the Upminster Road, about two miles from Brentwood, which is managed by a joint committee consisting of nine members: six representing Brentwood Urban District Council, and three representing Billericay Rural District Council. This joint Committee exists in consequence of the formation of the Special Drainage District before mentioned. The situation is an anomaly, and from a Health Officer's point of view, unsatisfactory. The reports of this Committee are periodically read at the respective Council meetings, but as no discussion or criticism is permitted the Committee is to all intents and purposes an independent authority. It is therefore hardly possible for the Medical Officer of Health to make a satisfactory report on the Sewage and Drainage System of his own particular District, when the control of the System is vested in an Authority with which he has nothing to do. One point in connection with this system of dual control which has puzzled me a good deal and which seems to me to be a little irregular is the fact that although in the same sewage system the bye-laws or regulations with regard to the drainage of houses in the Special Drainage District are in some instances the direct opposite to those in vogue in Brentwood. For example, the rain water from the roofs of houses is allowed to drain in to the sewer in the Brentwood District, whereas in the Special Drainage District, all sorts of pains and penalties are threatened if such a thing is attempted.

There are two main sewers each 10 inches in diameter which run parallel from Brook Street to the Sewage Works. One of these takes the drainage of the Special Drainage District, and the other, that of Brentwood proper. The Brentwood 10 inch main sewer, as I have already mentioned in a former report, runs from the straining pit in Kavanagh's Lane straight to the Sewage Works, and has connected with it, on Brook Street Hill, the 9 in. sewer from the North side of the town, so that the drainage of about 6000 persons besides a large quantity of surface water from Brentwood is supposed to be taken by this 10 in. pipe.

The sewage at the Works is partly treated with Alumino-ferric and lime and settling tanks, and partly by means of bacteria beds which were constructed about two years ago. I understand that even now the works are not working in a satisfactory manner.

In my Report for 1901, I ventured to suggest, that a new sewer be laid, which would take the whole drainage of Brentwood and the thickly populated area immediately adjoining, but owing I believe to diversity of opinion amongst the different Authorities interested, nothing of this kind could be done. Instead of this however, there are now surrounding the town within a radius of two miles, no less than four Sewage Works and another I am told still contemplated, in spite of the fact that a scheme for one was abandoned in consequence of the non-compliance of the Local Government Board.

4.—Excrement Disposal ; system in vogue ; defects, if any.

Water-closets with flushing apparatus are in general use in the better class houses, but in about 80 per cent of the cottage property, the closets are hand-flushed, and the pans are consequently found in a more or less filthy condition.

5.—Removal and disposal of house refuse.

Public Scavengers are employed for removing once a week the refuse from the backs of the houses. This system is working fairly satisfactorily at present, but there is no doubt that difficulties will arise sooner or later with regard to the dumping ground. The only rational solution to this question would be the provision of a destructor. Ash receptacles of impervious material are supplied at cost price by the Council.

6.—*Water Supply.*

The town is supplied by the South Essex Water Works Company.

For some years there has been a scarcity of water in the higher parts of the town, but the Company have erected a water tower near Warley Barracks, I understand for the purpose of remedying this defect.

7.—*Places over which the Council have supervision, e.g., lodging-houses, bake-houses, slaughter-houses and workshops.*

There is only one common lodging-house in the District, which during the last year has been kept in a fairly sanitary condition.

The bake-houses and slaughter-houses have been regularly inspected, and are all periodically lime-washed and generally speaking, maintained in a satisfactory state of cleanliness.

Workshops. Certain forms to be filled up respecting Factories, Workshops, &c. have this year been issued to Medical Officers of Health. All the workshops inspected have been found in a fairly satisfactory condition, and there is nothing calling for special comment.

8.—*Nuisances.*

The Inspectors summary shows that of 485 nuisances abated, 461 were detected during the course of inspection and 35 in consequence of complaints. One hundred and one notices were served, but in no case was it found necessary to take legal proceedings.

The Inspector reports at each monthly meeting upon the work done and in cases where informal notices have been disregarded formal notices are ordered to be served.

9.—*Methods of dealing with infectious diseases.*

The medical men as a rule notify promptly, and usually give me every assistance. When a case is notified, the house is visited at once by either the Inspector or myself, and in case of the removal of the patient to the Isolation Hospital, the premises are immediately cleansed and disinfected. If the patient is isolated and treated at home, the premises are disinfected on notification from the medical attendant of the patient's convalescence.

There is no Isolation Hospital in the District, but there is an arrangement with the Billericay Rural Authority for sending cases of infectious disease to the Billericay Isolation Hospital. It is generally admitted that it would be much more satisfactory to have an Isolation Hospital for Brentwood Urban District, but as this District as at present constituted is too small to maintain efficiently an Isolation Hospital, the question of providing one cannot at present be entertained. It is hoped however that the area will, before long, be extended so as to take in the more or less thickly populated portions immediately adjoining and surrounding Brentwood, and thus solve this and other questions connected with the sanitary administration of the District.

Disinfection of infected articles is carried out by means of a Thresh's Portable Disinfector, which has proved to be not only an efficient and easy method of disinfecting clothes, bedding, &c., but has also been a success from a pecuniary point of view.

Houses are disinfected by a spray apparatus with which the walls, ceilings, furniture, &c. are impregnated with a disinfecting solution.

10.—Prevalence of Infectious Diseases.

During the year there were 39 cases of infectious diseases notified to me, a number which exceeds that for any previous year. This increase is principally due to the excessive prevalence of diphtheria.

The notifications for 1904 were as follows :—

| | |
|---------------|----|
| Diphtheria | 29 |
| Scarlet Fever | 7 |
| Erysipelas | 2 |
| Enteric Fever | 1 |

The numbers notified in the four previous years were :—

For 1900 there were 21 of which 5 were diphtheria.

| | | | | | | | |
|------|---|---|----|---|----|---|---|
| 1901 | „ | „ | 26 | „ | 18 | „ | „ |
| 1902 | „ | „ | 31 | „ | 2 | „ | „ |
| 1903 | „ | „ | 16 | „ | 2 | „ | „ |

Of the 29 cases of diphtheria notified during 1904, eleven occurred at the Hackney Training Schools, and twelve on the North side

of the town; the months in which they occurred and the number in each month being as under :—

| | | | | | |
|-----------|-----|---|----------|-----|----|
| April | ... | 7 | October | ... | 11 |
| May | ... | 4 | November | ... | 2 |
| September | ... | 3 | December | ... | 2 |

The numbers of each sex and age is shown by the following table :

| Sex. | Under 1 year. | 1—5 | 5—10 | 10—15 | 15—25 | 25 upwards. | Total. |
|---------|------------------|-----|------|-------|-------|----------------|--------|
| Males | | 2 | 7 | 4 | | | 13 |
| Females | 1 | 2 | 7 | 4 | 1 | 1 | 16 |

In consequence of the prevalence of the disease at the Hackney Schools in April and May, I made a thorough inspection of the whole premises. I found that the surface water including the washings from the yards and floors of some of the urinals discharged into a pond at the back of the swimming bath, and that there was no visible outlet to this pond. The water from it was supplied by means of pumping to the dormitories, bake-house, kitchen and other parts of the building, to be used for washing purposes only. This arrangement I considered a menace to the health of the inmates, for three reasons, viz, 1st, this water was used for washing the tables and other utensils in the bake-house. 2nd, it was used for washing the cooking utensils, and 3rd, there was nothing to prevent the children from drinking this contaminated water from the taps in the dormitories.

I communicated with the School Authorities and a sub-committee was appointed to confer with me. Accordingly at an appointed time I met the Committee and the matter was thoroughly discussed with the result that the whole water supply was overhauled and all defects remedied.

The School Authorities much appreciated the efforts of the Council's Health Officers in pointing out sanitary defects and in giving advice as to the best means to adopt for remedying these defects. Indeed, in every way they showed a sincere desire to promote the

welfare of those under their care by ensuring sanitary and healthy surroundings.

The fact of the disease being specially prevalent in the North side of the town in the month of October was, I think, due to spread of infection from the immediate neighbouring district.

During the latter part of April and beginning of May a severe epidemic of measles occurred at the Brentwood Schools. A special report on the outbreak was presented to the Council on 2nd May. The Schools were closed for a period of six weeks.

Towards the end of May an epidemic of measles broke out in St. Helen's Schools, which were closed for a period of three weeks. A special report on this outbreak was presented to the Council on the 30th of this month.

During the months of June and July the disease seemed to have quite disappeared, but in the first week in August there was a recurrence of the epidemic in the Infants' Department of St. Helen's Schools which made it necessary to close this particular school for three weeks. Since then the District has been practically free from disease.

11.—Vital Statistics.

Deaths from all causes —Fifty-eight deaths were registered in the District during the year. There were 10 deaths at Billericay Work-house of persons belonging to Brentwood. The total number of deaths was therefore 68, which is equivalent to a death-rate of 11.1 per 1000 persons living. The population has this year been greatly increased owing principally to the Highwood Schools becoming occupied and receiving about 300 children. My estimate up to the middle of the year is 6098.

Of the total number of deaths 38 were males and 30 females, and there were 21 deaths of persons above 70 years, 15 above 80, and 3 above 90, the oldest being 94.

12.—Zymotic Death Rate.

There were 2 deaths from diarrhoea and one from diphtheria

making 3 deaths in all from diseases classified as specific febrile or zymotic. This is equivalent to a zymotic death-rate of .49 per 1000.

The following are the figures for the last five years :—

| | | | | |
|---------------------|-----|-----|-----|------|
| 1900 | ... | ... | ... | 1.05 |
| 1901 | ... | ... | ... | .44 |
| 1902 | ... | ... | ... | .38 |
| 1903 | ... | ... | ... | 1.06 |
| 1904 | ... | ... | ... | .49 |
| Average for 5 years | | | | .68 |

13.—*Infantile Mortality.*

During the year there were 102 births and 8 deaths of infants under one year of age. The infantile mortality was 78.4, which as is shown on Table I, is much below the average for the previous five years.

14.—*Birth Rate.*

There were 102 births registered during the year, which is equivalent to a birth-rate of 16.7 per 1000 of the whole population. In order however to calculate correctly the birth-rate, it is necessary to allow for an average of 950 children living at the Hackney Training, St. Charles, and Highwood Schools. Reckoning on these data we get a corrected birth-rate of 19.2.

The following table shows the death, birth and zymotic rates, and infant mortality :—

| | | | |
|---|-----|-----|-------|
| Population, census of 1901 | ... | ... | 4,932 |
| Population, estimated to middle of 1904 | | | 6,098 |
| Deaths registered in the District | ... | | 58 |
| Corrections | ... | ... | +10 |
| Corrected death-rate | ... | ... | 11.1 |
| Zymotic death-rate | ... | ... | .49 |
| Birth-rate on whole population | ... | ... | 16.7 |
| *Corrected birth-rate | ... | ... | 19.2 |
| Infant Mortality | ... | ... | 78.4 |

The above résumé of the year's work and statistics is on the whole

*After deducting the number of children living at the Hackney, St. Charles, and Highwood Schools from the whole population.

very satisfactory. Considerable sanitary improvements have been effected and the provision of a Mortuary by the Council under their own authority is a matter of congratulation.

The whole reflects great credit upon the Council, all the members of which take a lively interest in the sanitary well-being of the District.

Tables of mortality and sickness, compiled in accordance with the requirements of the Local Government Board's instructions are appended, together with a table relating to factories and workshops ; also a summary of work done through the Sanitary Inspector.

I am, Gentlemen.

Your obedient servant,

SAMUEL FRAZER,

Medical Officer of Health.

Lansdowne House,

Brentwood.

Vital Statistics of Whole District during 1904 and previous Years.

| Year. | Popula- tion estimated to Middle of each Year. | Births. | | Total Deaths Registered in the District. | | | | Total Deaths in Public Institutions in the District. | | | Deaths of Non-Residents registered in Public Institutions beyond the District. | | | Nett Deaths at all Ages belonging to the District. | |
|-------------------------------------|---|---------|--------|--|----------------------------------|--------------|--------|--|-----|-----|--|-------|--|--|--|
| | | Number. | Rate.* | Under 1 Year of Age | | At all ages. | | 9 | 10 | 11 | 12 | 13 | | | |
| | | | | Number. | Rate per 1,000 Births registered | Number. | Rate.* | | | | | | | | |
| | | | | | | | | | | | | | | | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | | | | | |
| 1899 | 5270 | 84 | 15.9 | 13 | 154.7 | 57 | 10.8 | 4 | 4 | 7 | 60 | 11.3 | | | |
| 1900 | 5355 | 135 | 27.9 | 12 | 88.8 | 62 | 11.5 | 1 | 1 | 8 | 69 | 13.05 | | | |
| 1901 | 4957 | 82 | 16.5 | 10 | 121.9 | 48 | 9.68 | 0 | 0 | 5 | 53 | 10.69 | | | |
| 1902 | 5157 | 91 | 17.6 | 12 | 131.8 | 44 | 8.5 | 0 | 0 | 12 | 56 | 10.8 | | | |
| 1903 | 5557 | 106 | 18.7 | 9 | 84.9 | 53 | 9.3 | 4 | 4 | 5 | 54 | 9.56 | | | |
| Averages, for years 1899-1903 | 5259 | 99 | 19.3 | 11.2 | 116.4 | 52.8 | 9.9 | 1.8 | 1.8 | 7.4 | 58.4 | 11.08 | | | |
| 1904 | 6098 | 102 | 16.7 | 8 | 78.4 | 58 | 9.5 | 1 | 1 | 10 | 68 | 11.1 | | | |

* Rates in Columns 4, 8, and 13 calculated per 1,000 of estimated population.

NOTE.—The deaths included in Column 7 of this table are the whole of those registered during the year as having actually occurred within the district or division. The deaths included in column 12 are the number in column 7, corrected by the subtraction of the number in Column 10 and the addition of the number in Column 11.

By the term "Non-residents" is meant persons brought into the district on account of sickness or infirmity, and dying in public institutions there; and by the term "Residents" is meant persons who have been taken out of the district on account of sickness or infirmity, and have died in public institutions elsewhere (workhouse).

The "Public institutions" to be taken into account for the purpose of these Tables are those into which persons are habitually received on account of sickness or infirmity, such as hospitals, workhouses and lunatic asylums. A list of the Institutions in respect of the deaths in which corrections have been made is given at foot of this Table.

Area of District in acres (exclusive of area covered by water)...354.

Total population at all ages.....4932 }
 Number of inhabited houses..... 916 } At Census
 Average number of persons per house... 5.5 of 1901.

TABLE IV.

Causes of, and Ages at, Death during Year 1904.

| CAUSES OF DEATH. 1 | DEATHS IN OR BELONGING TO WHOLE DISTRICT AT SUBJOINED AGES. | | | | | | | Total deaths in pub- lic in- stituti- ons in Distct. 16 |
|---|--|-----------------------|--------------------------|---------------------------|----------------------------|----------------------------|------------------------------|--|
| | All ages. 2 | Under 1 year. 3 | 1 and under 5 4 | 5 and under 15 5 | 15 and under 25 6 | 25 and under 65 7 | 65 and up- wards. 8 | |
| Small-pox | ... | ... | ... | ... | ... | ... | ... | ... |
| Measles | ... | ... | ... | ... | ... | ... | ... | ... |
| Scarlet fever | ... | ... | ... | ... | ... | ... | ... | ... |
| Whooping-cough | ... | ... | ... | ... | ... | ... | ... | ... |
| Diphtheria and membranous croup | 1 | ... | 1 | ... | ... | ... | ... | ... |
| Croup | ... | ... | ... | ... | ... | ... | ... | ... |
| Fever { Typhus | ... | ... | ... | ... | ... | ... | ... | ... |
| | ... | ... | ... | ... | ... | ... | ... | ... |
| | ... | ... | ... | ... | ... | ... | ... | ... |
| Epidemic influenza | ... | ... | ... | ... | ... | ... | ... | ... |
| Cholera | ... | ... | ... | ... | ... | ... | ... | ... |
| Plague | ... | ... | ... | ... | ... | ... | ... | ... |
| Diarrhœa | 2 | 1 | ... | ... | ... | 1 | ... | ... |
| Enteritis | 1 | 1 | ... | ... | ... | ... | ... | ... |
| Puerperal fever | ... | ... | ... | ... | ... | ... | ... | ... |
| Erysipelas | ... | ... | ... | ... | ... | ... | ... | ... |
| Other septic diseases... .. | ... | ... | ... | ... | ... | ... | ... | ... |
| Phthisis | 6 | ... | ... | 2 | 1 | 2 | 1 | ... |
| Other tubercular diseases | 3 | ... | 1 | 2 | ... | ... | ... | ... |
| Cancer, malignant disease | 5 | ... | ... | ... | ... | 3 | 2 | ... |
| Bronchitis | 8 | ... | ... | ... | ... | 2 | 6 | ... |
| Pneumonia | 2 | 1 | 1 | ... | ... | ... | ... | ... |
| Pleurisy | ... | ... | ... | ... | ... | ... | ... | ... |
| Other diseases of respiratory organs | 1 | ... | 1 | ... | ... | ... | ... | ... |
| Alcoholism, Cirrhosis of liver | 1 | ... | ... | ... | ... | 1 | ... | ... |
| Venereal diseases | ... | ... | ... | ... | ... | ... | ... | ... |
| Premature birth | 1 | 1 | ... | ... | ... | ... | ... | ... |
| Diseases and accidents of parturition | ... | ... | ... | ... | ... | ... | ... | ... |
| Heart diseases | 11 | ... | ... | 2 | ... | 3 | 6 | ... |
| Accidents | ... | ... | ... | ... | ... | ... | ... | ... |
| Suicides | 1 | ... | ... | ... | ... | 1 | ... | ... |
| Old Age | 12 | ... | ... | ... | ... | ... | 12 | ... |
| Apoplexy | 4 | ... | ... | ... | ... | 1 | 3 | ... |
| All other causes | 9 | 4 | ... | 1 | ... | 3 | 1 | ... |
| All causes | 68 | 8 | 4 | 7 | 1 | 17 | 31 | |

Inspection of Workshops, Factories, Laundries, Workplaces, &c.

Seven Workshops were visited during 1904: Three nuisances detected'
which were remedied.

Summary of Work done through the Sanitary Inspector.

In the Urban Sanitary District of Brentwood during the year ending December 31st, 1904.

| | <i>Total Number for Year</i> | <i>Notes, Results of Inspection, &c.</i> |
|--|--------------------------------------|--|
| 1 Complaints received | 35 | |
| 2 Nuisances detected without complaint | 461 | |
| 3 Nuisances abated | 485 | |
| 4 Notices served | 101 | |
| 5 Summonses taken out ... | | |
| 6 Convictions | | |
| 7 Cottages inspected | 457 | |
| 8 Lodging-houses inspected ... | 1 | Visited Periodically |
| 9 Slaughter-houses inspected ... | 8 | do do |
| 10 Bake-houses inspected ... | 9 | do do |
| 11 Dairies & Milk Shops inspected | 3 | do do |
| 12 Cowsheds inspected | 2 | do do |
| 14 Filthy Houses cleansed, sec. 46 Public Health Act, 1875. ... | 1 | |
| 15 Houses disinfected | 28 | |
| 16 Overcrowding abated | 1 | |
| 17 Houses erected | 36 | |
| 18 Houses connected with sewers | 47 | |
| 19 Houses connected with water mains | 39 | |
| 20 Privies and W.C.'s repaired; W.C.'s supplied with water | 6 | |
| 21 Animals improperly kept re- moved | 6 | |

(Signed) JAMES E. FOTHERGILL,

Professional Associate of the Surveyors' Institute ; Member
Association of Municipal and County Engineers ; Member
Royal Sanitary Institute.

